



Fig.1

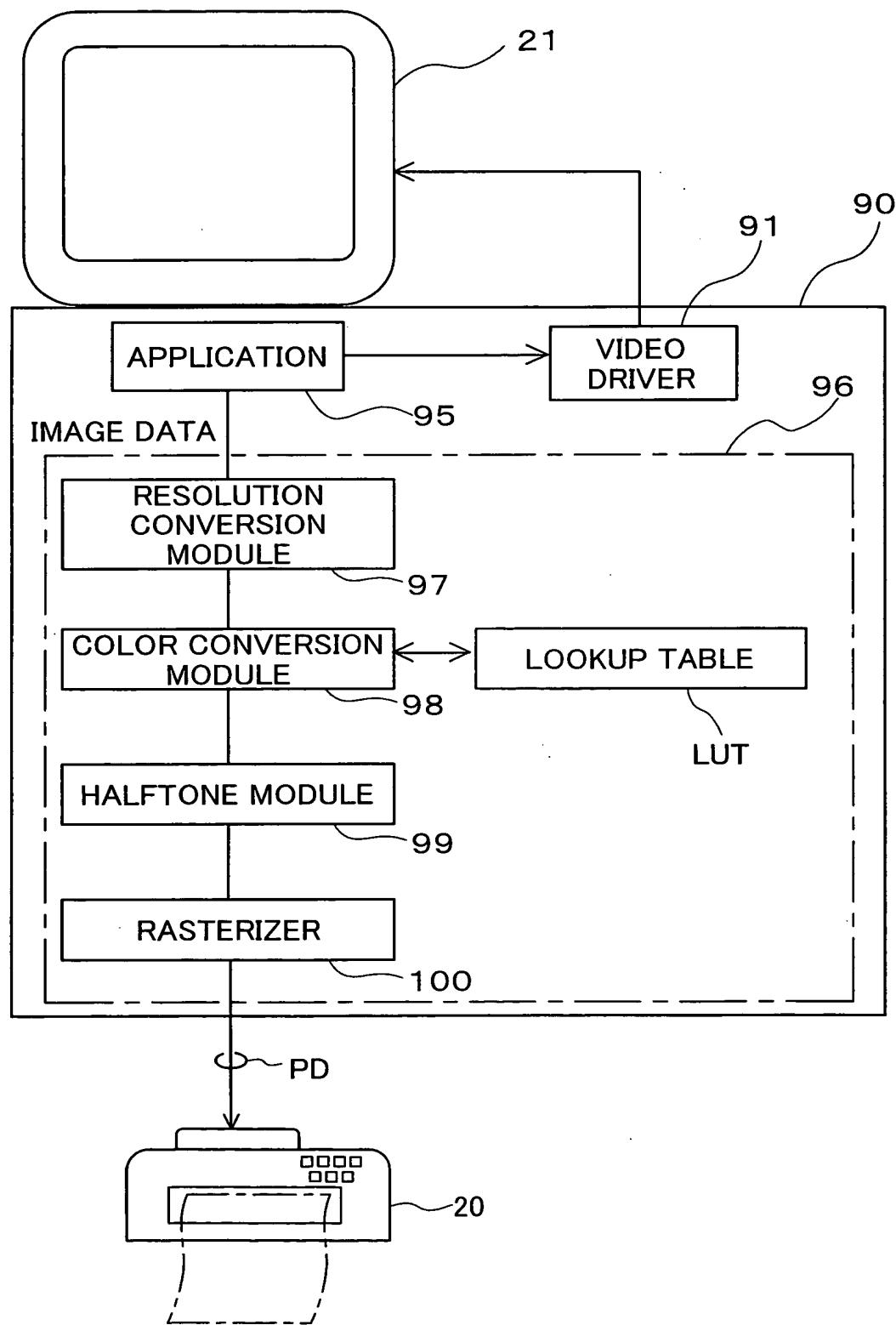


Fig.2

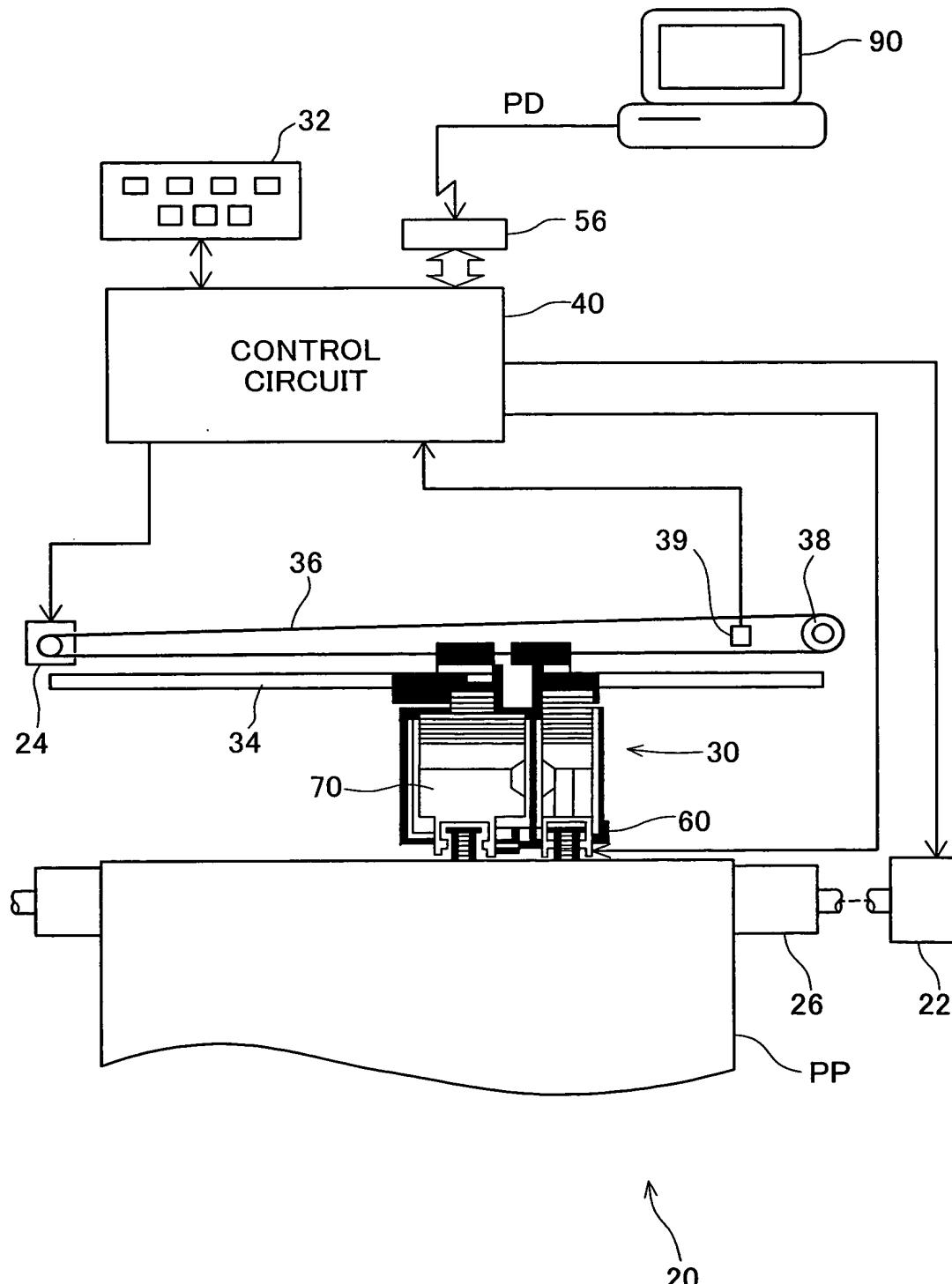


Fig.3

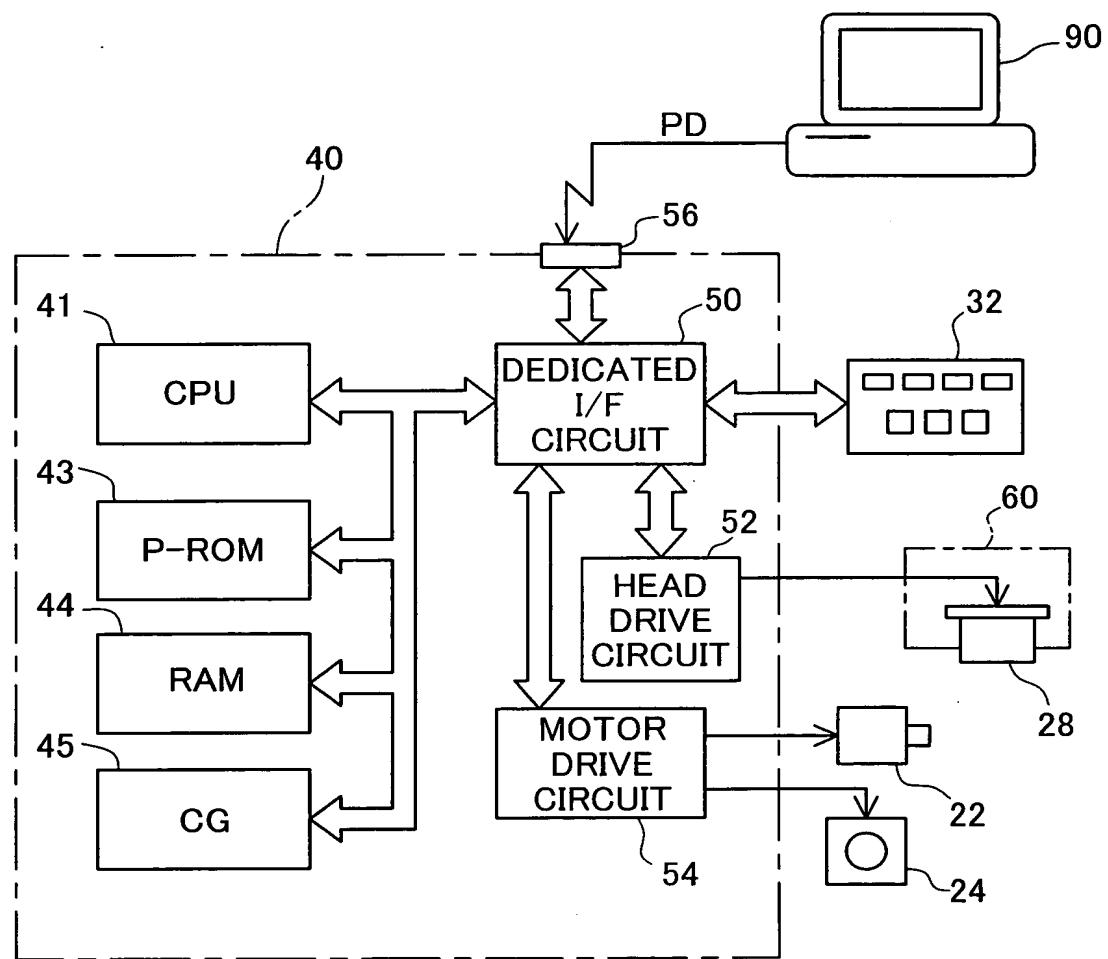


Fig.4

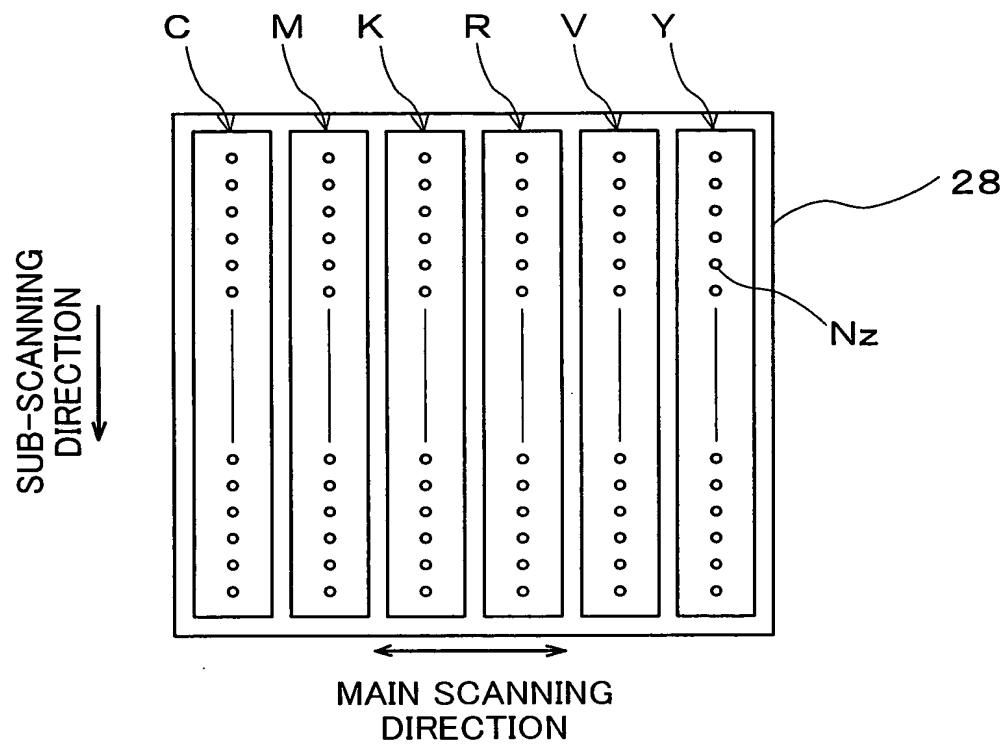


Fig.5(a)

Ink		Y	M	C	R	V	K
Colorant	Type (C.I.)	PY128	PR122	PB15:3	PO43	PV23	PBk7
	Density	2.0	2.0	1.5	2.0	2.0	2.0
Dispersant		1.0	1.0	1.0	1.0	1.0	1.0
Glycerin		15.0	15.0	15.0	15.0	15.0	15.0
Ethylene glycol		5.0	5.0	5.0	5.0	5.0	5.0
2-pyrrolidone		2.0	2.0	2.0	2.0	2.0	2.0
1,2-hexanediol		5.0	5.0	5.0	5.0	5.0	5.0
SURFYNOL E1010		0.5	0.5	0.5	0.5	0.5	0.5
Ion exchange water		q.v.	q.v.	q.v.	q.v.	q.v.	q.v.

(wt%)

Dispersant: styrene/acrylic acid copolymer

PY: Pigment Yellow
 PR: Pigment Red
 PB: Pigment Blue
 PO: Pigment Orange
 PV: Pigment Violet
 PBk: Pigment Black

Fig.5(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	0.71	2.86	3.57

Fig.5(c)

V	wCV	wMV	wYV	CMY Total
1.0	0.68	2.89	0.0	3.57

Fig.6

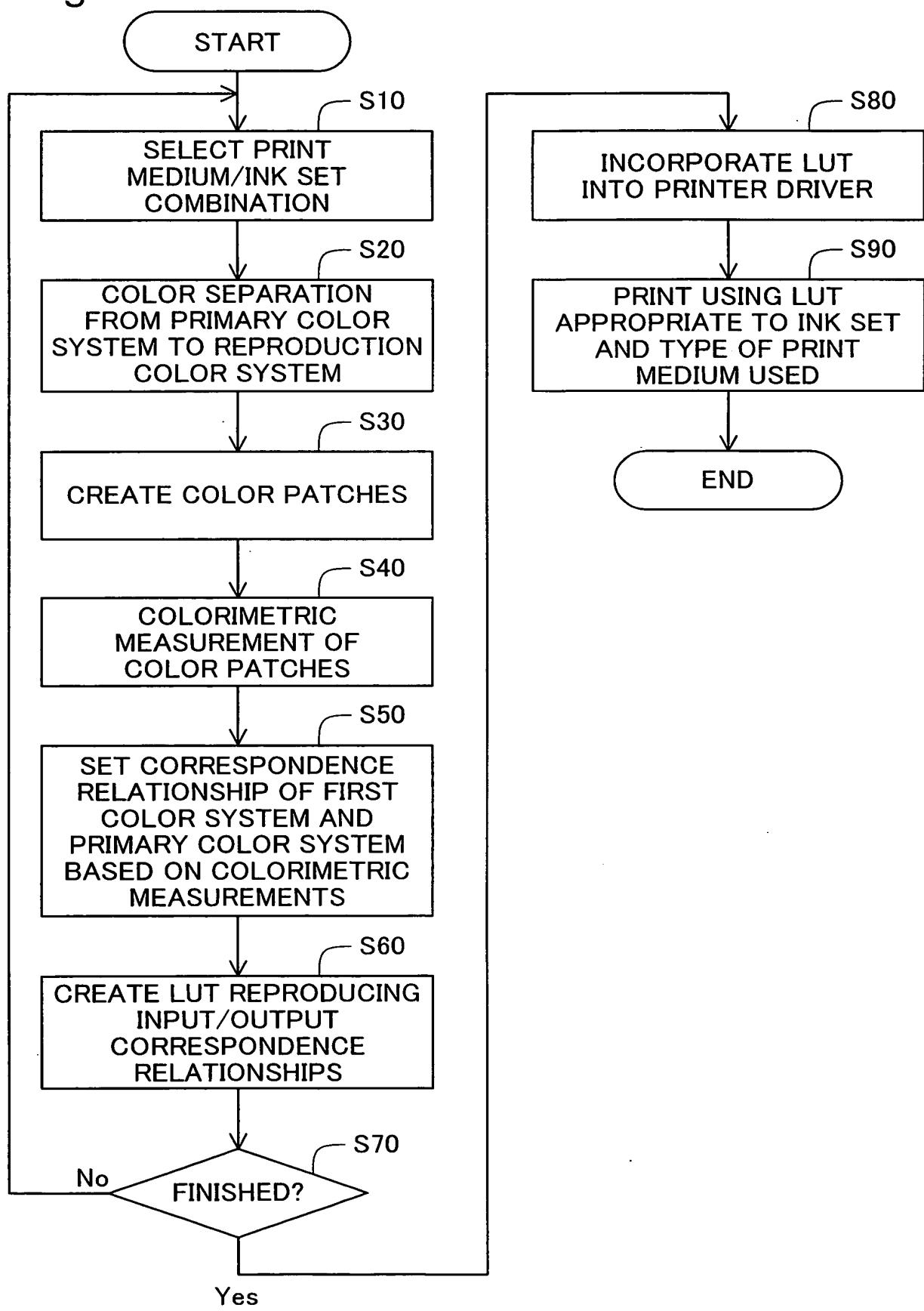


Fig.7

Cyan ink C tone value = 0

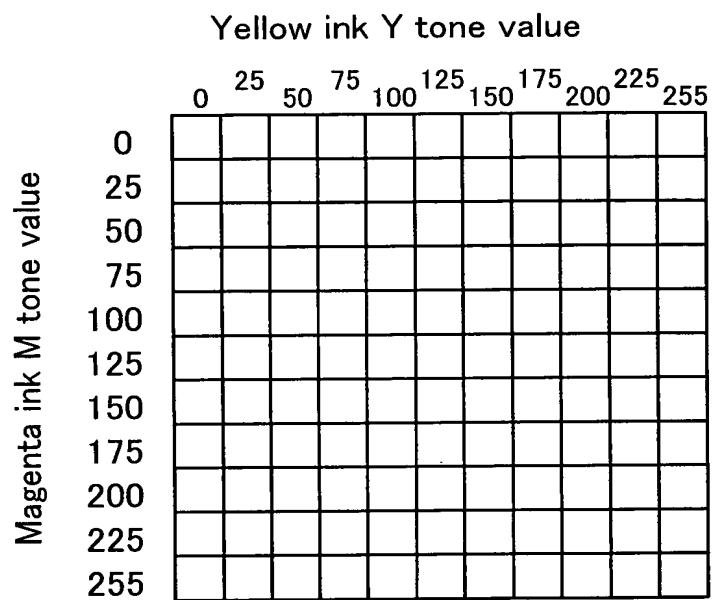


Fig.8

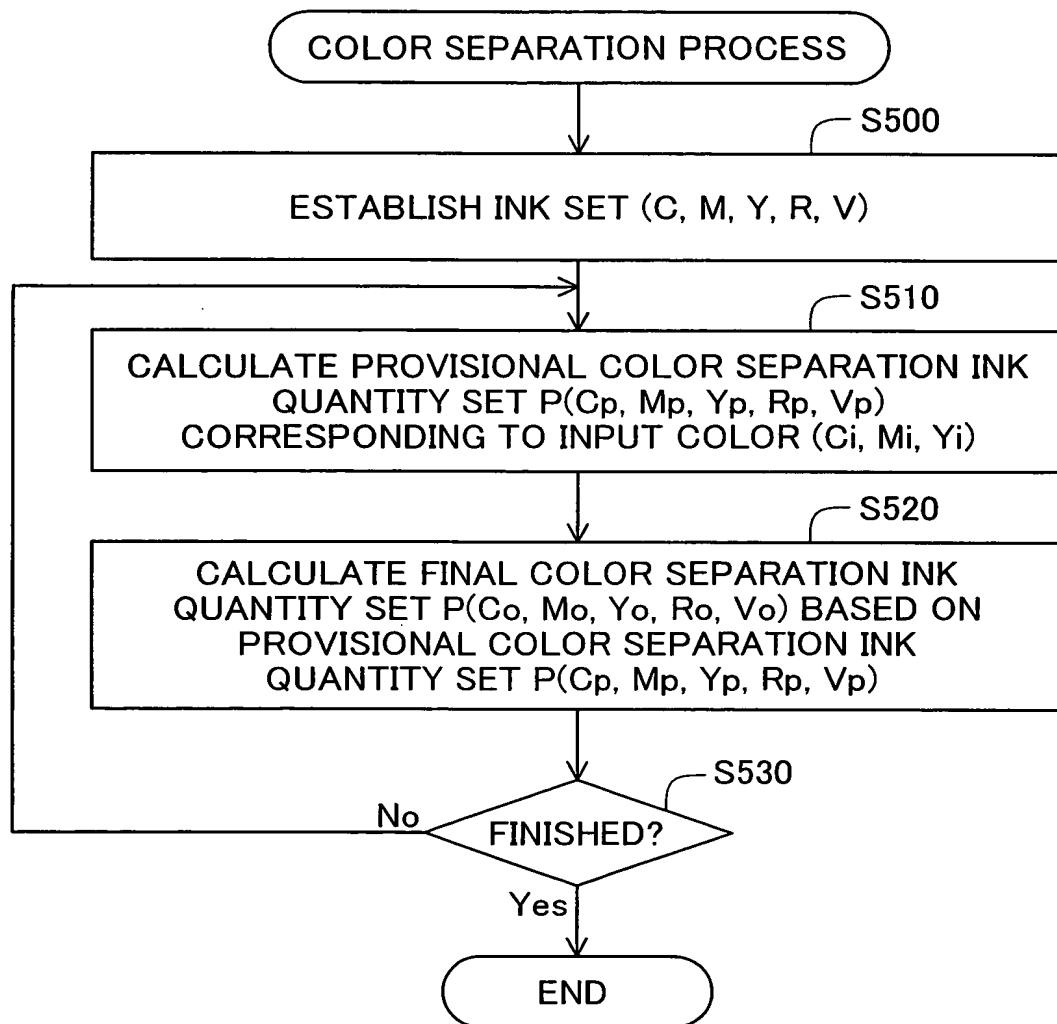


Fig.9

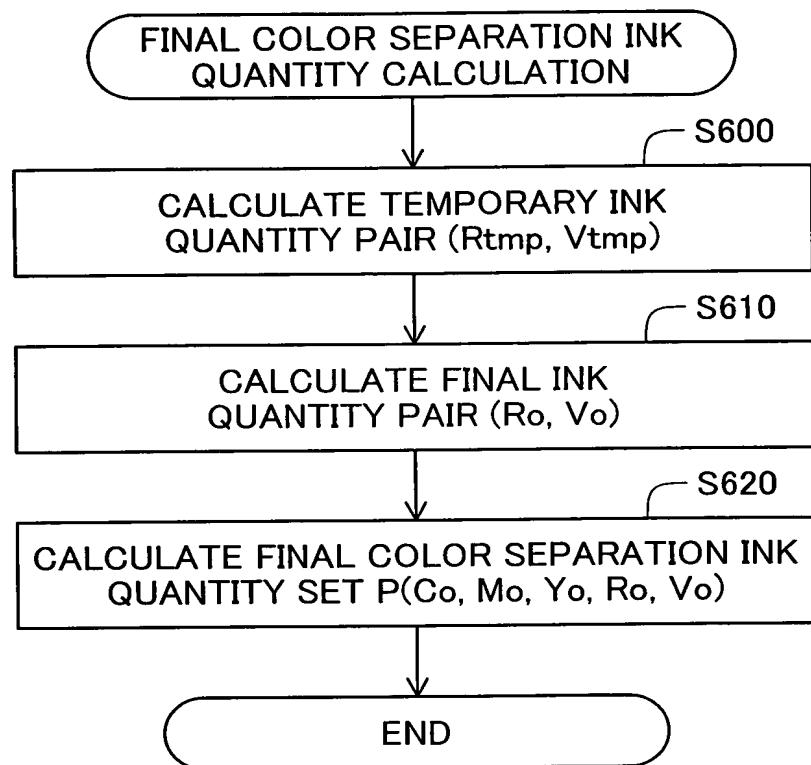


Fig.10(a)

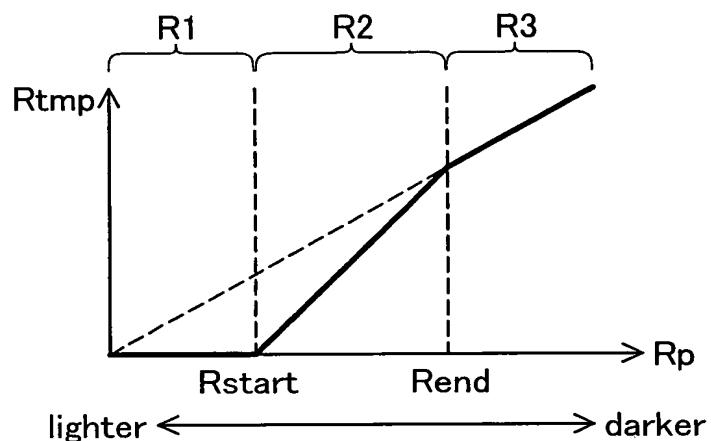


Fig.10(b)

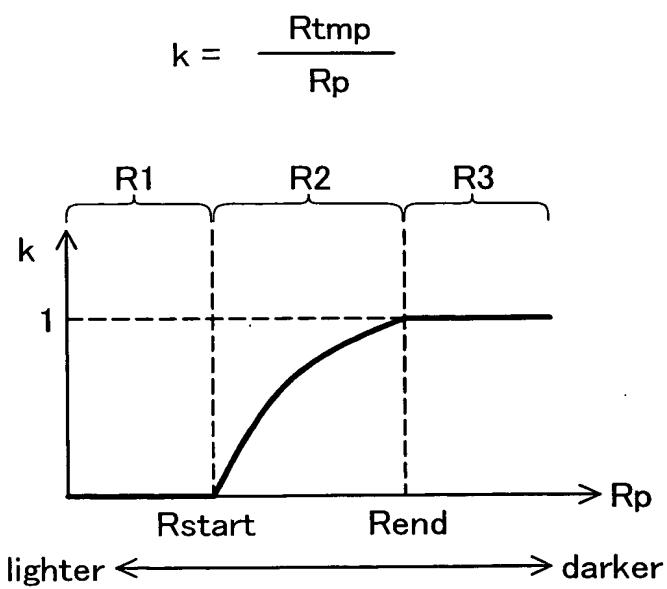


Fig.11(a)

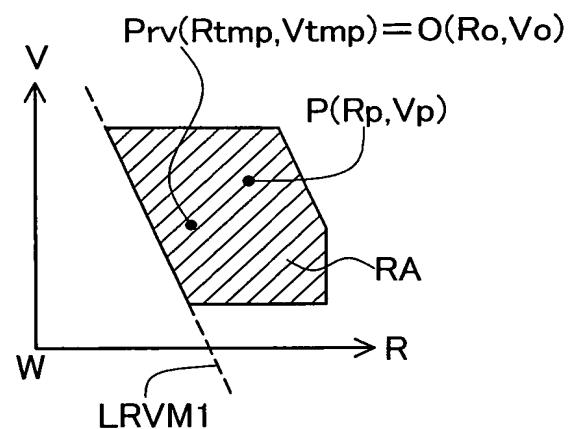


Fig.11(b)

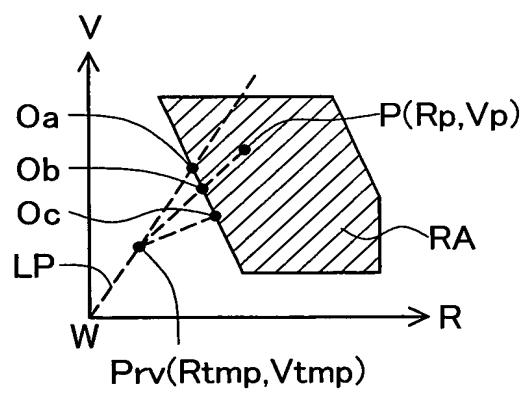


Fig.12

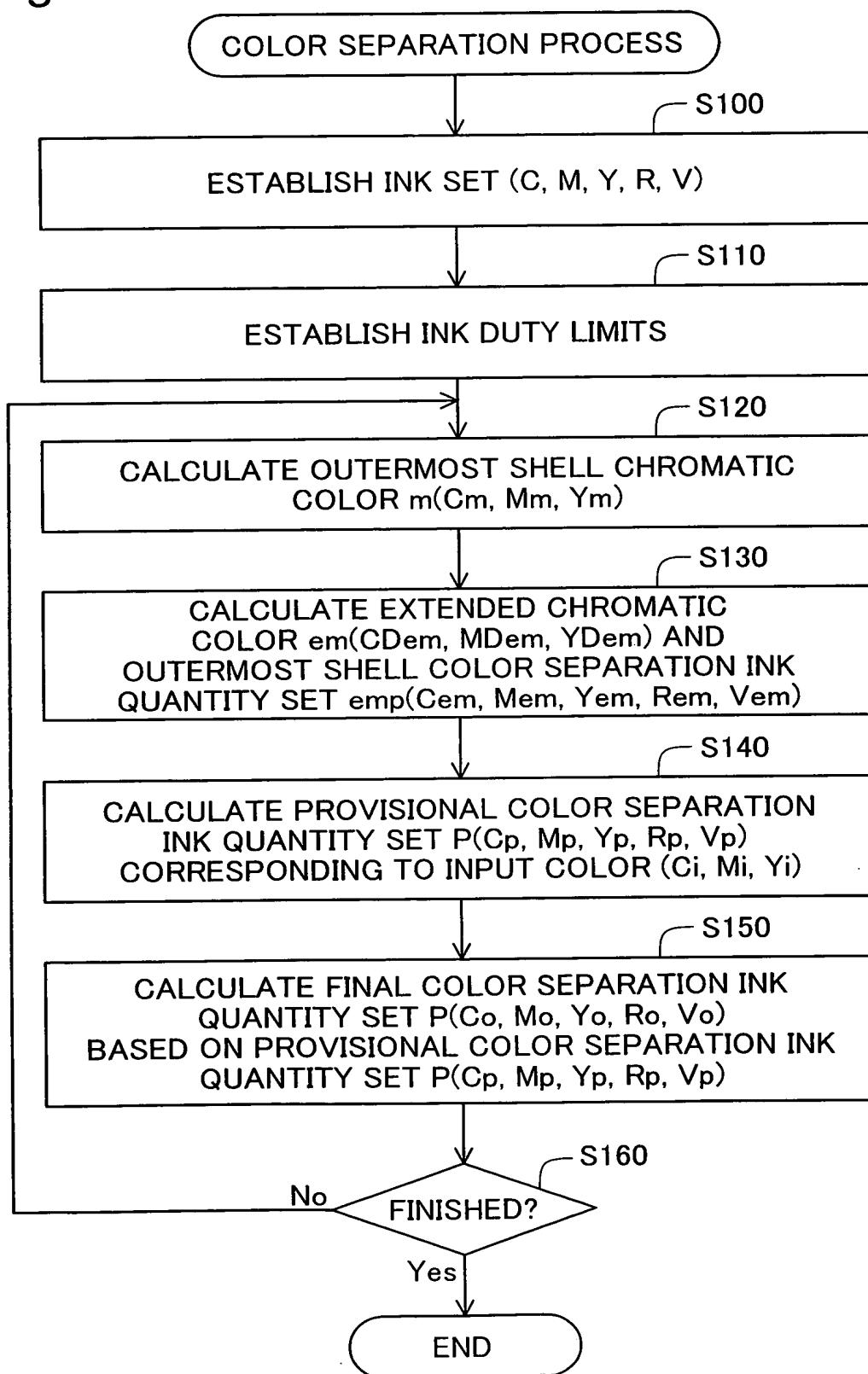


Fig.13(a)

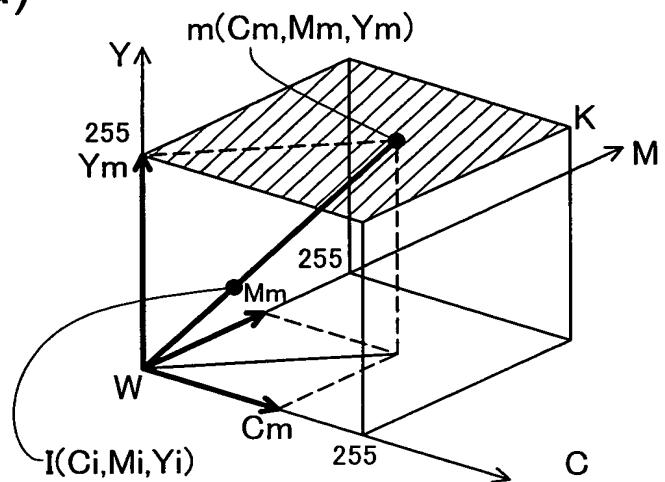


Fig.13(b)

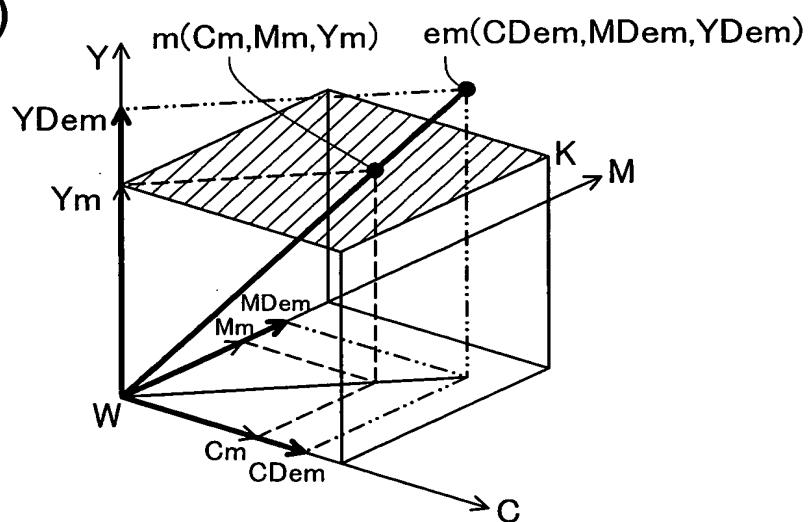


Fig.13(c)

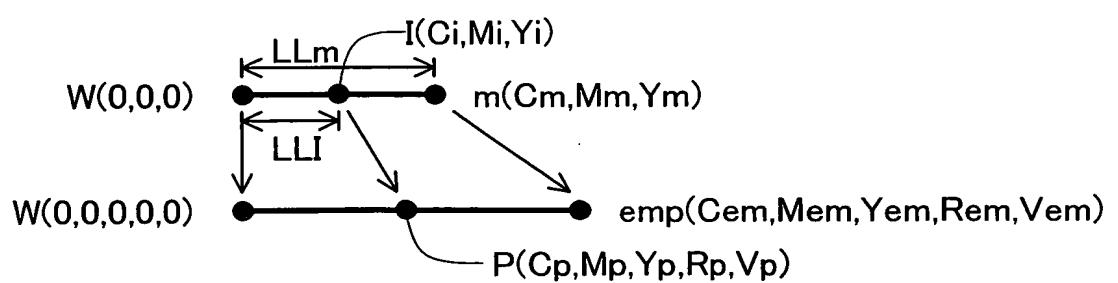


Fig.14(a)

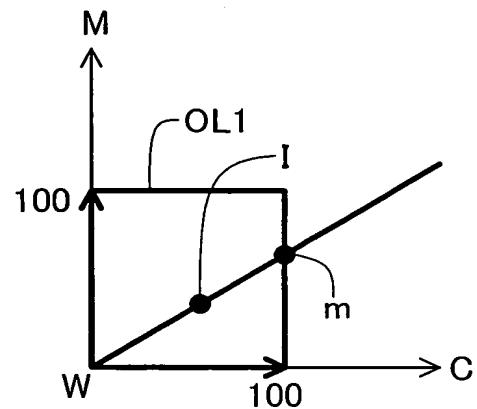


Fig.14(b)

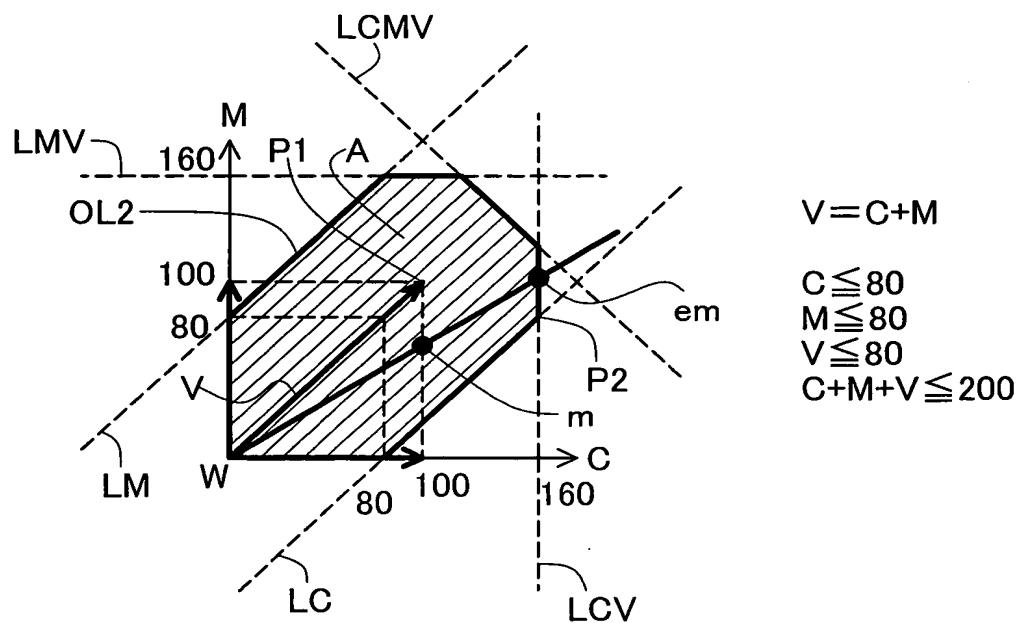


Fig.15

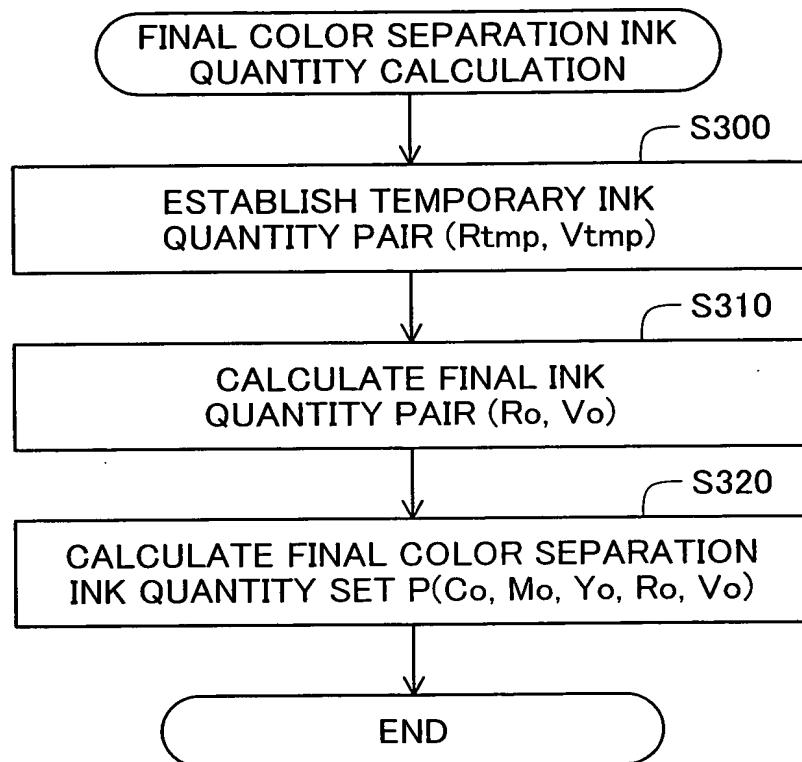


Fig.16(a)

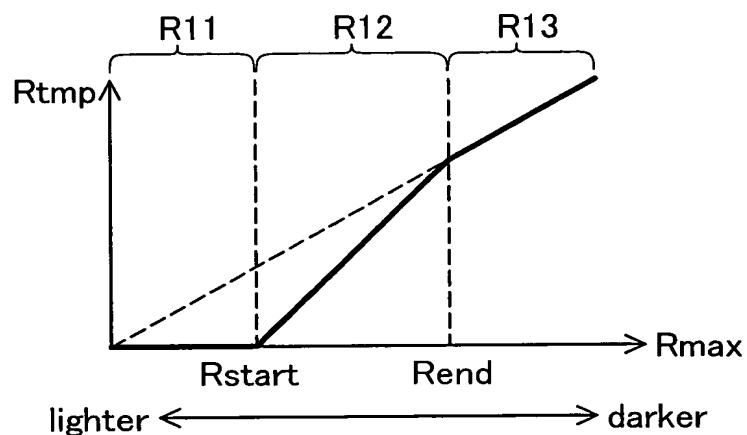


Fig.16(b)

$$k = \frac{R_{tmp}}{R_{max}}$$

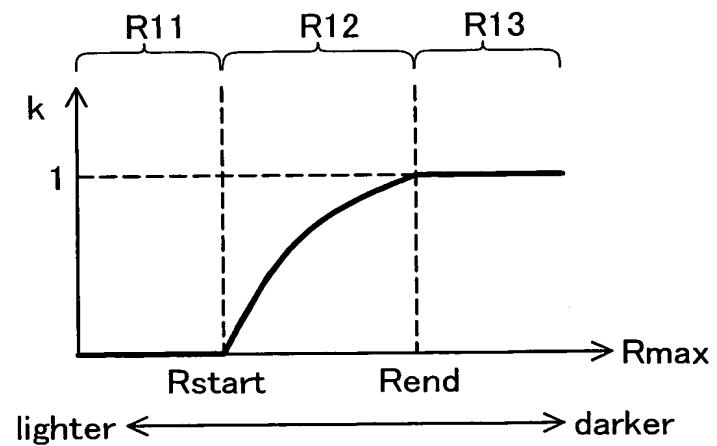


Fig.17(a)

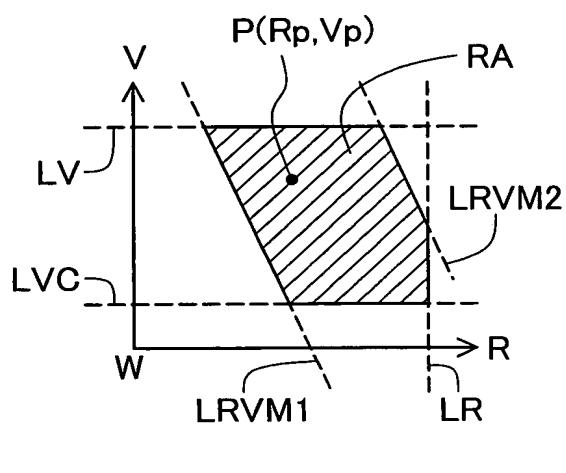


Fig.17(b)

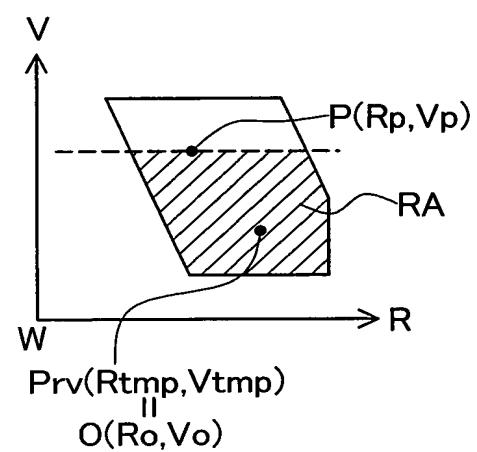


Fig.17(c)

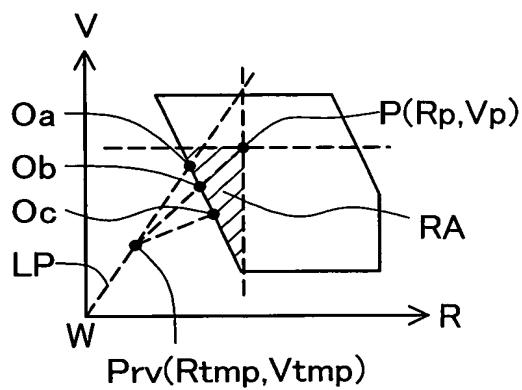


Fig.17(d)

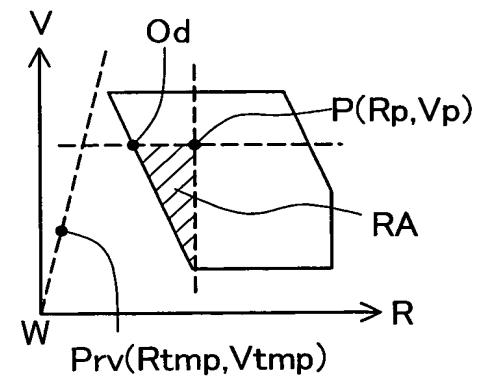


Fig.18

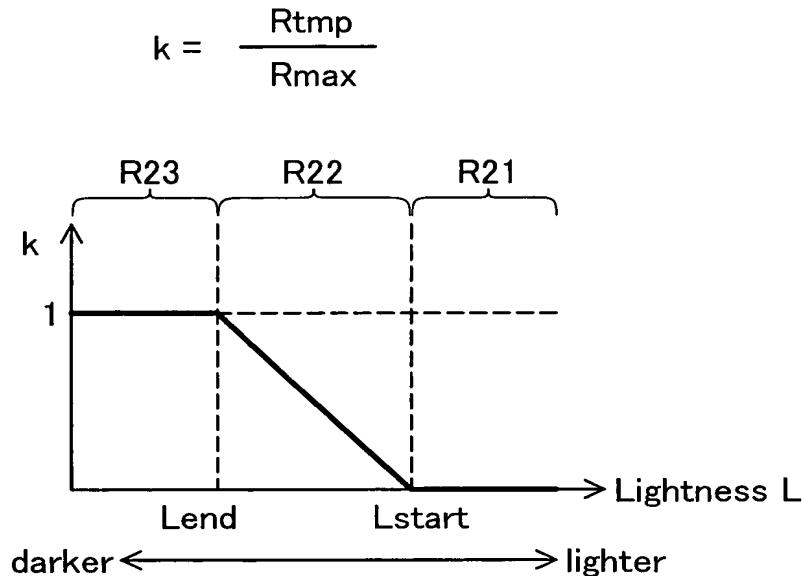


Fig.19

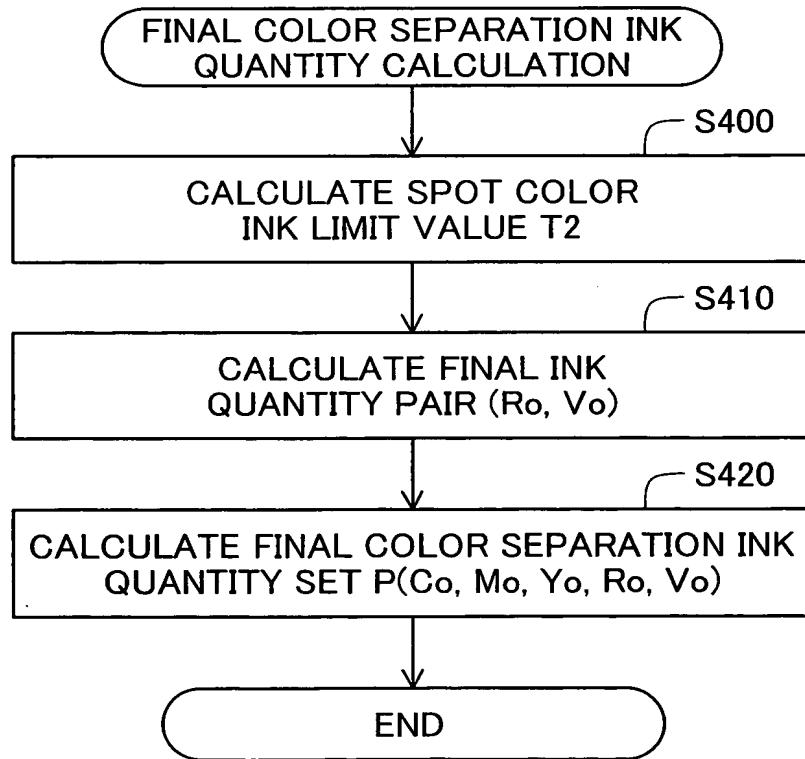


Fig.20

$$k2 = \frac{T2}{T2\max}$$

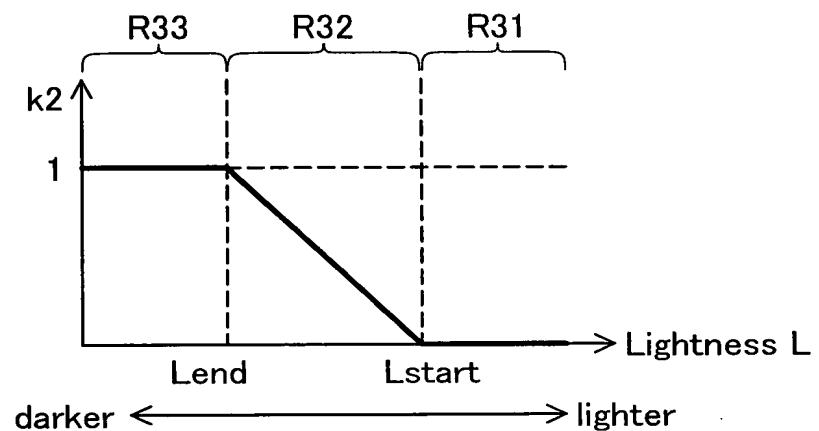


Fig.21(a)

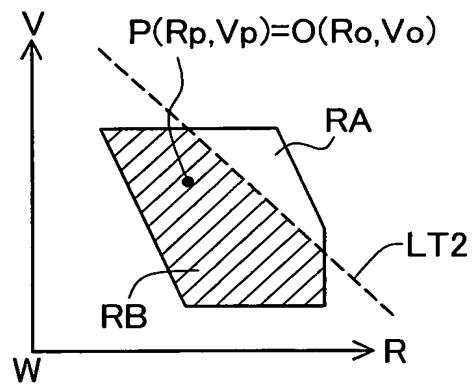


Fig.21(b)

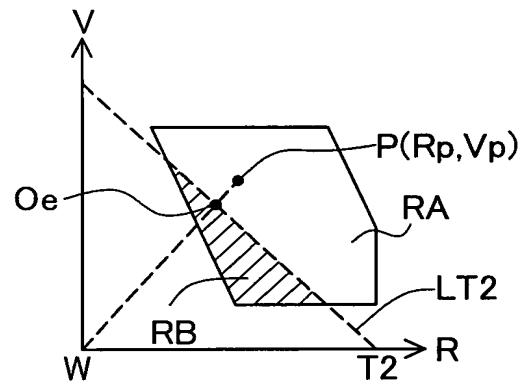


Fig.21(c)

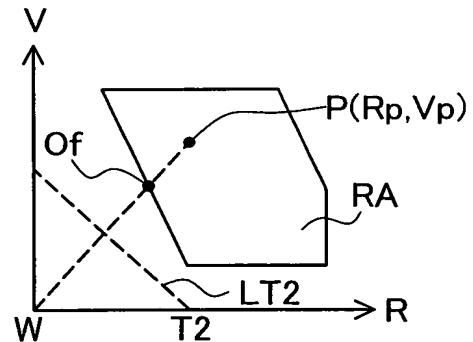


Fig.22

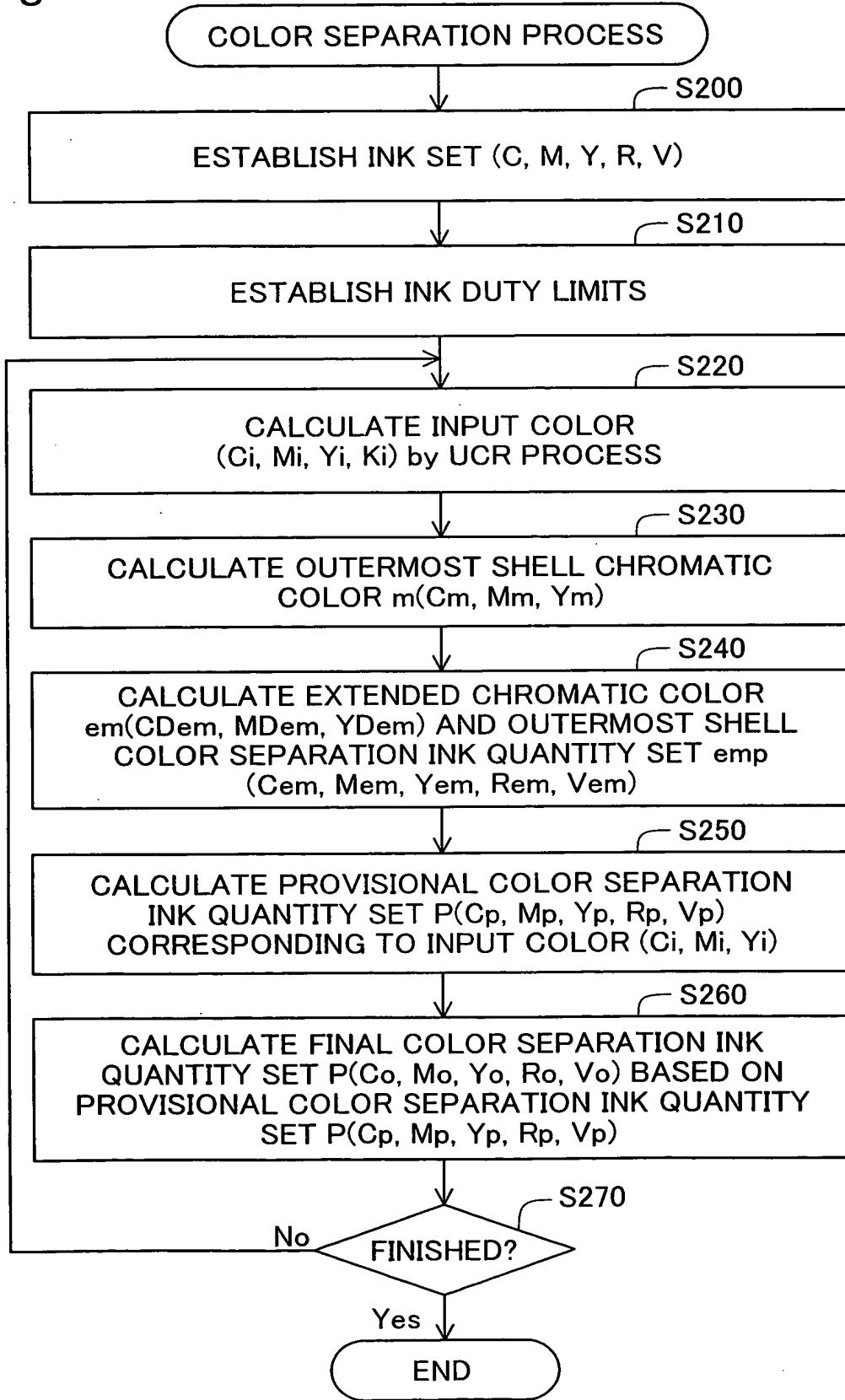


Fig.23

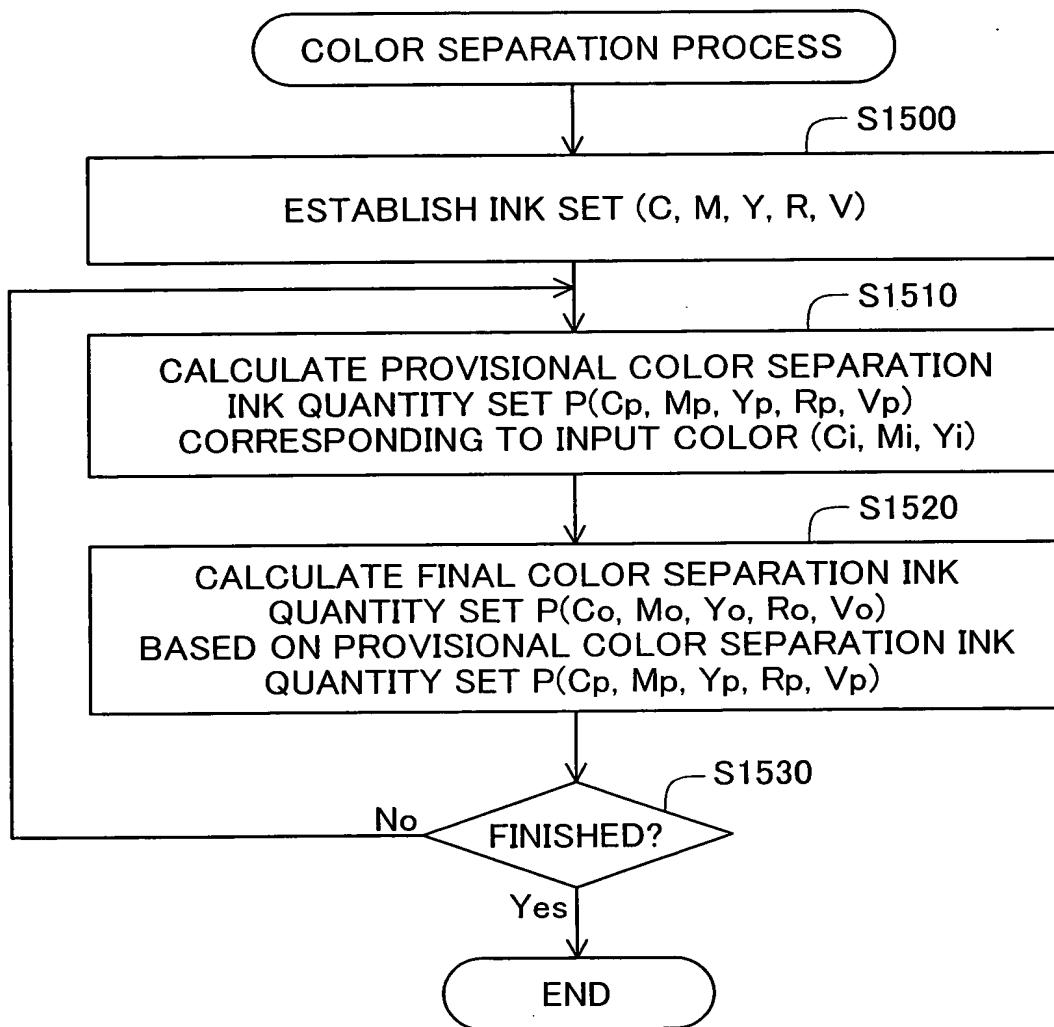


Fig.24

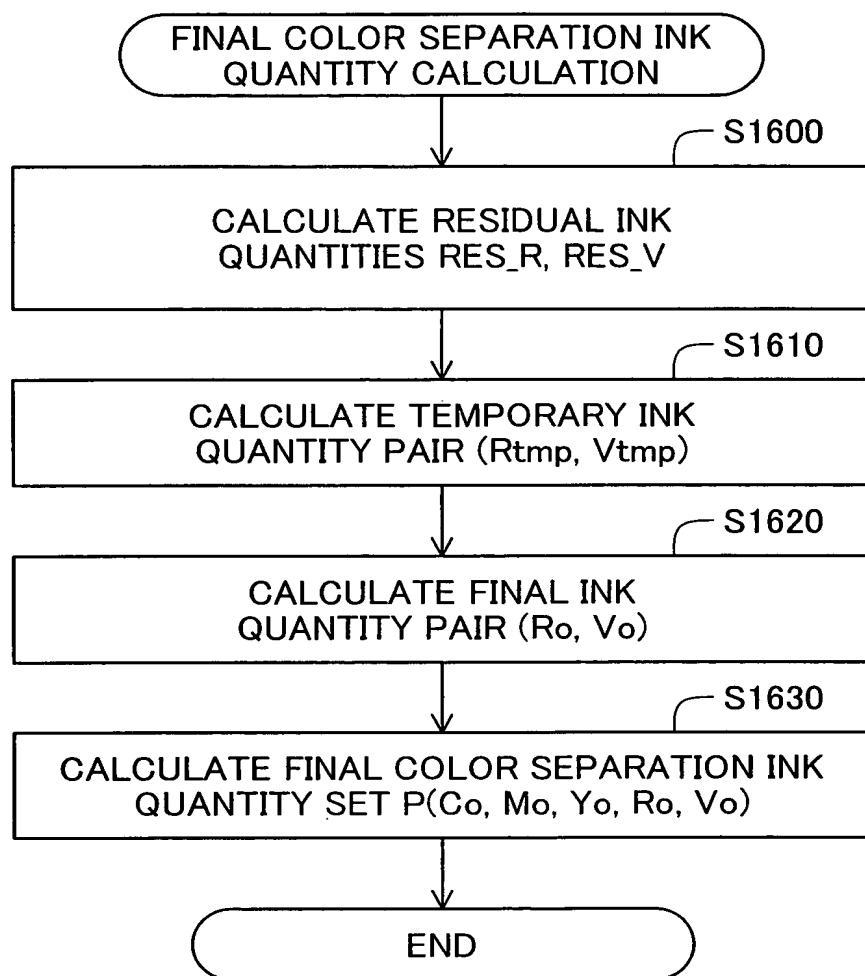


Fig.25(b)
Ink quantities for
reproducing color ColA
(V ink max.: 100% usage rate)

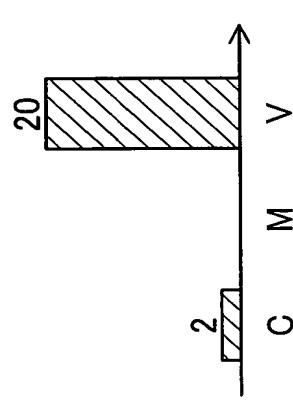


Fig.25(a)

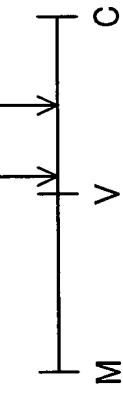


Fig.25(d)
Ink quantities for
reproducing color ColB
(V ink max.: 100% usage rate)

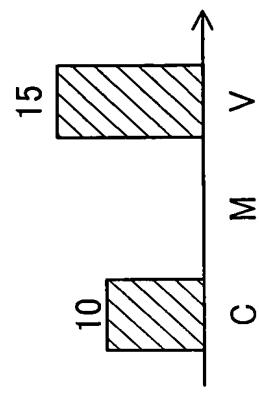


Fig.25(e)
Ink quantities for
reproducing color ColB
(graininess improvement:
67% usage rate)

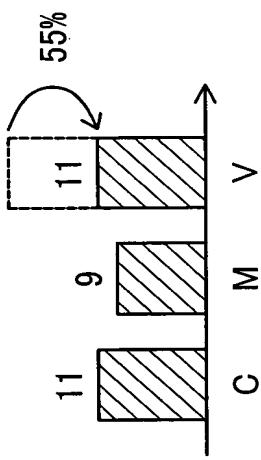


Fig.25(c)
Ink quantities for
reproducing color ColA
(graininess improvement:
55% usage rate)

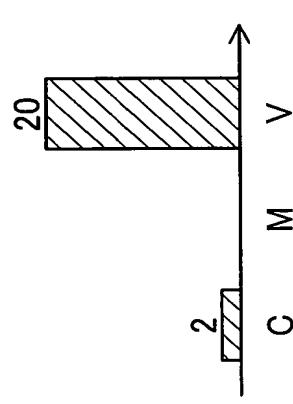


Fig.26(a)

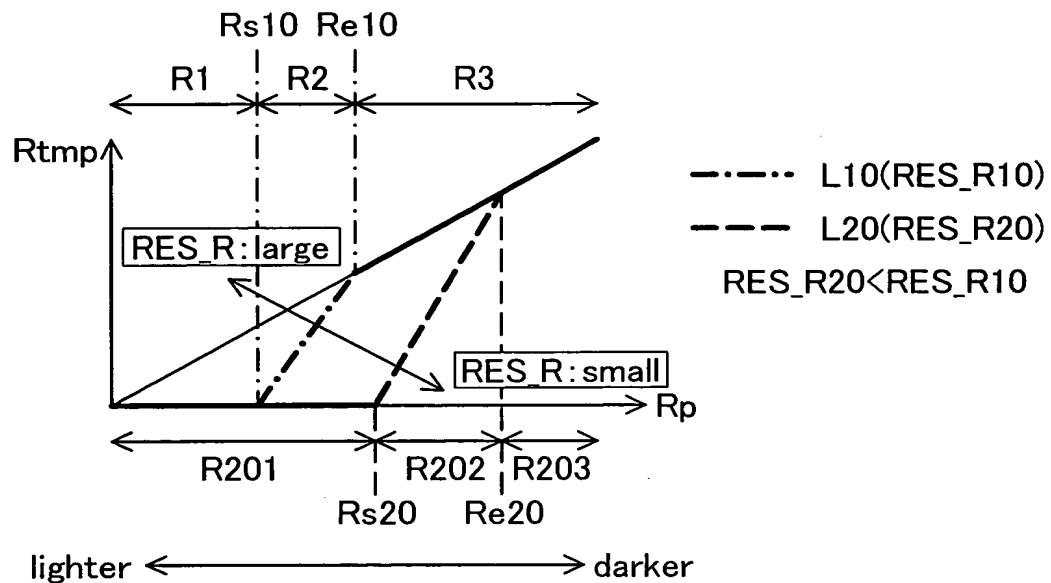


Fig.26(b)

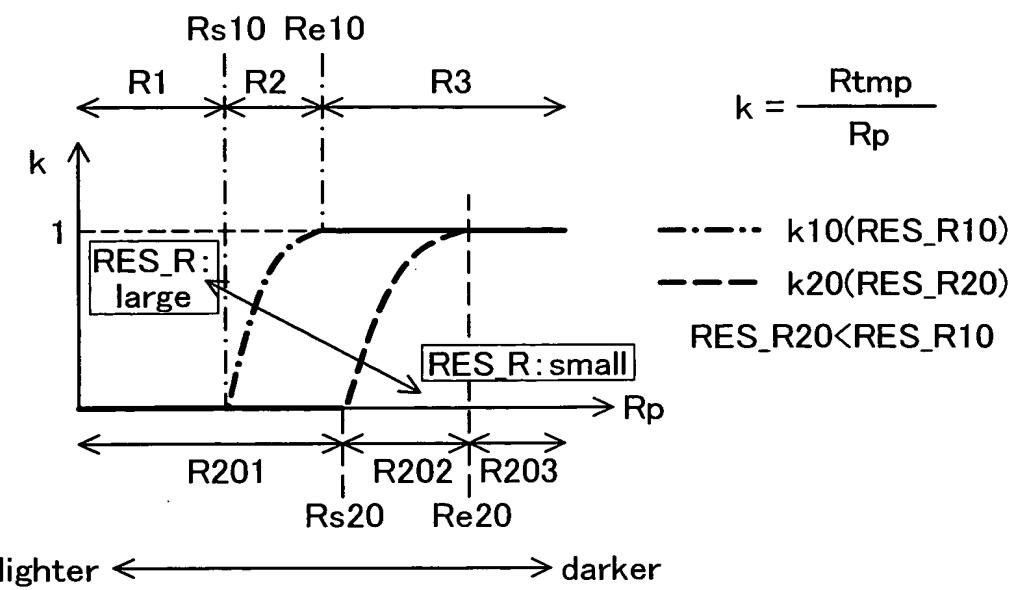


Fig.27

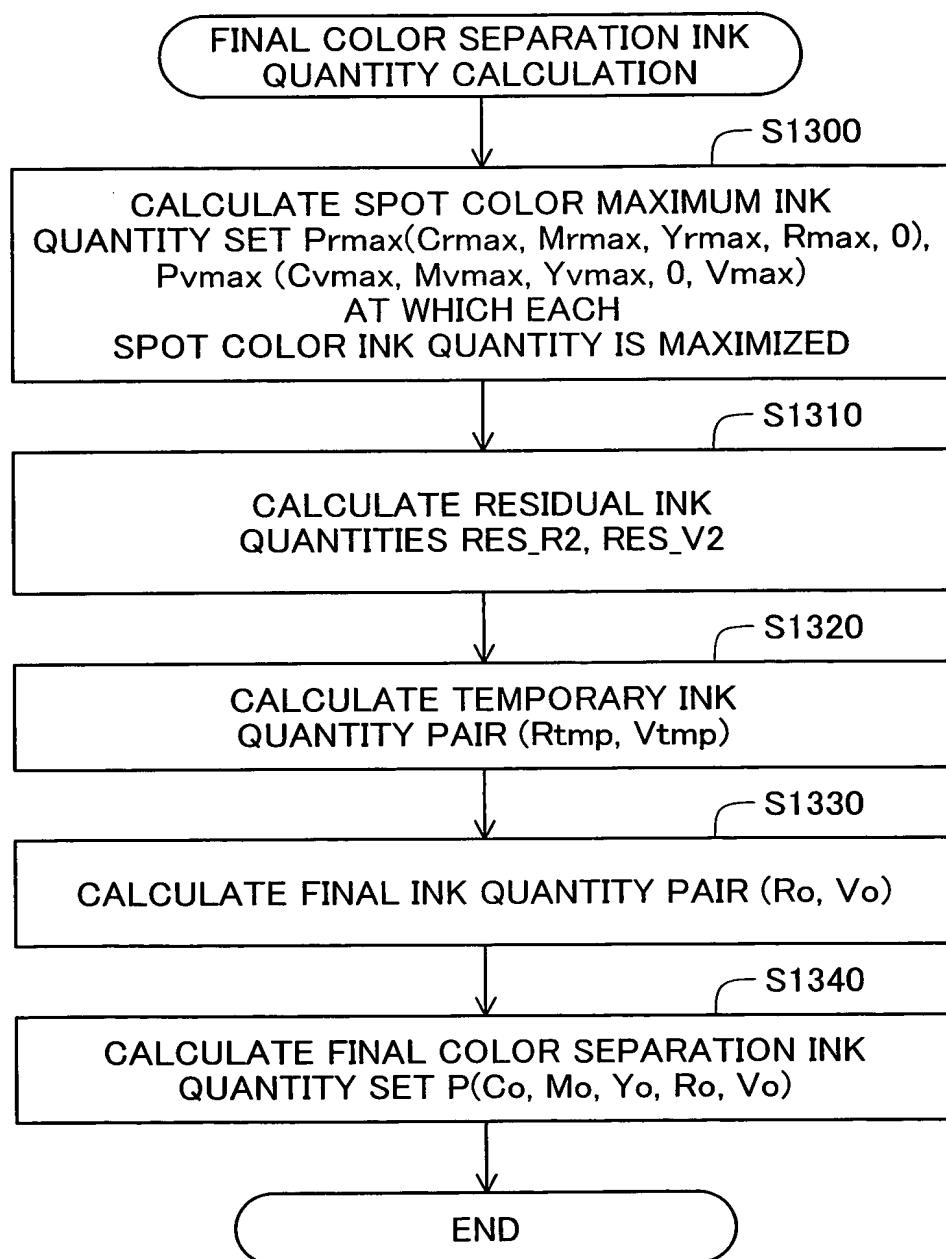


Fig.28(a)

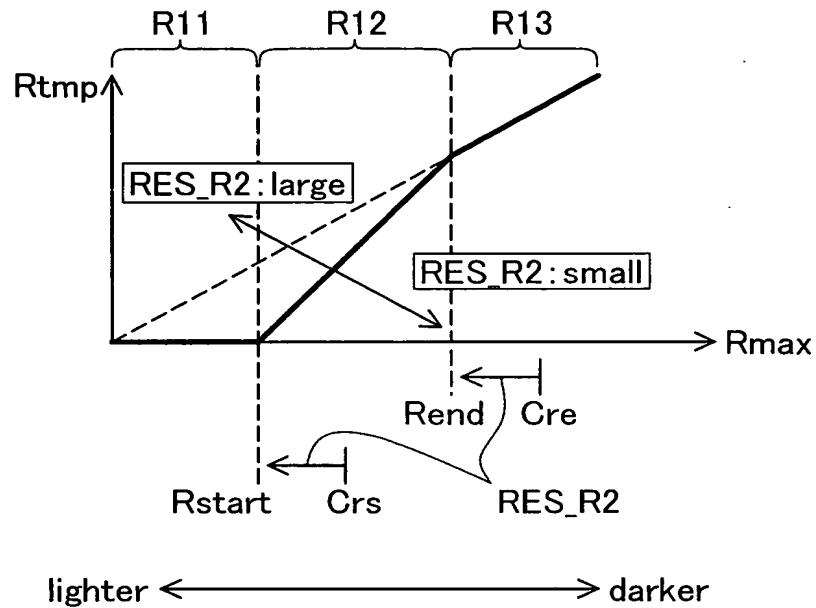


Fig.28(b)

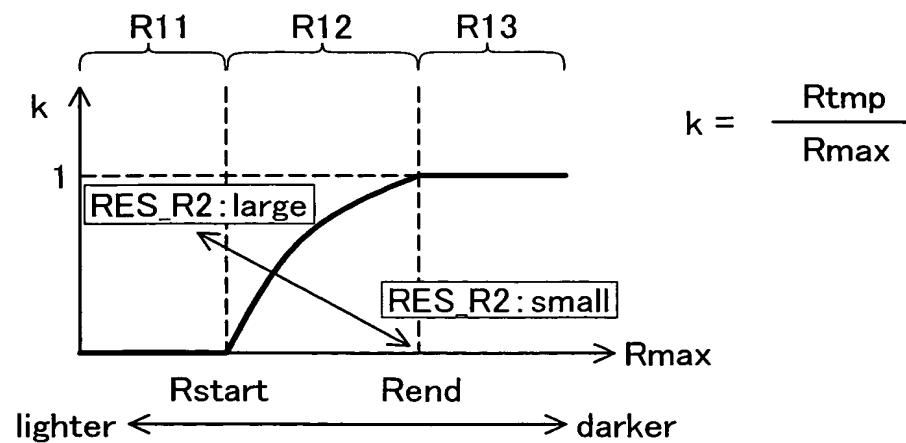


Fig.29

$$k = \frac{R_{tmp}}{R_{max}}$$

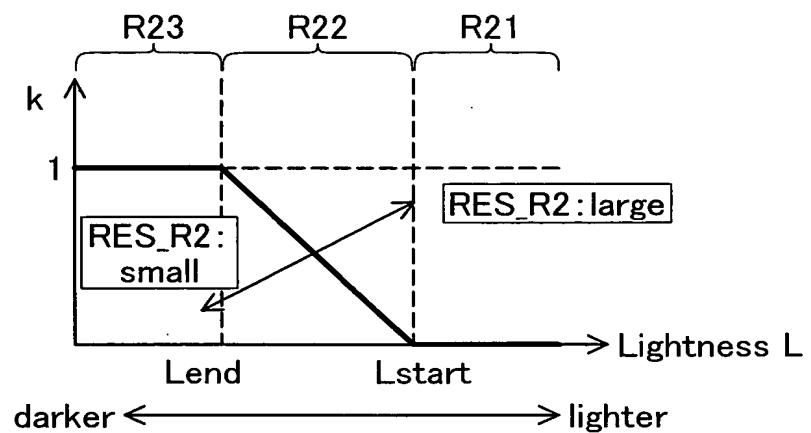


Fig.30(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY128	PR122	PB15:3	PR178	PB60
	Density	2.0	2.0	1.5	2.0	4.0

(wt%)

Fig.30(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	1.58	1.05	2.63

Fig.30(c)

V	wCV	wMV	wYV	CMY Total
1.0	1.25	0.83	0.0	2.08

Fig.31(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY74	PR122	PB15:3	PO43	PV23
	Density	4.0	4.0	5.0	2.0	2.0

(wt%)

Fig.31(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	0.44	1.38	1.82

Fig.31(c)

V	wCV	wMV	wYV	CMY Total
1.0	1.28	4.28	0.0	5.56

Fig.32(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY74	PR122	PB15:3	PR178	PB60
	Density	4.0	4.0	5.0	2.0	4.0

(wt%)

Fig.32(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	1.31	0.41	1.72

Fig.32(c)

V	wCV	wMV	wYV	CMY Total
1.0	2.20	0.30	0.0	2.50

Fig.33(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY128	PR122	PB15:3	PO43	PV23
	Density	4.0	3.0	2.0	2.0	2.0

(wt%)

Fig.33(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	0.81	1.89	2.70

Fig.33(c)

V	wCV	wMV	wYV	CMY Total
1.0	0.70	2.24	0.0	2.94

Fig.34(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY128	PR122	PB15:3	PR178	PB60
	Density	4.0	3.0	2.0	2.0	4.0

(wt%)

Fig.34(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	1.26	0.62	1.88

Fig.34(c)

V	wCV	wMV	wYV	CMY Total
1.0	1.33	0.70	0.0	2.03

Fig.35(a)

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY128	PR122	PB15:3	PR178	PV23
	Density	2.0	2.0	1.5	2.0	2.0

(wt%)

Fig.35(b)

R	wCR	wMR	wYR	CMY Total
1.0	0.0	1.58	1.05	2.63

Fig.35(c)

V	wCV	wMV	wYV	CMY Total
1.0	0.68	2.89	0.0	3.57

Fig.36

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY74	PR202	PB15:3	PR178	PV23
	Density	3.0	1.5	1.5	2.0	2.0
(wt%)						

Fig.37

Ink		Y	M	C	R	V
Colorant	Type (C.I.)	PY74	PV19	PB15:3	PR177	PV23
	Density	3.0	2.0	1.5	2.5	2.0
(wt%)						